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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/909,489	08/12/97	PEDDLE	4784.02

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LM21/1202

EXAMINER

PATEL, R

ART UNIT	PAPER NUMBER
2786	12

DATE MAILED: 12/02/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/909,489

Applicant(s)

Peddle

Examiner

Ramesh Patel

Group Art Unit

2786



☒ Responsive to communication(s) filed on Oct 1, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-75 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☒ Claim(s) 1-18, 50, 65, 66, 68-73, and 75 is/are ~~allowed~~ **rejected**

☒ Claim(s) 51, 52, 67, and 74 is/are ~~rejected~~ **objected to**

☒ Claim(s) 19-49 and 53-64 is/are ~~objected to~~ **allowed**

☐ Claims _____ are subject to restriction or election requirement

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 10

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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Response to the Amendment

1. Claims 1-75 are presented for examination. Claims 66-75 have been added due to the amendment filed on 10/1/99.
2. The corrected or substitute drawings were received on 10/1/99. These drawings are approved by examiner and draftsman.
3. The objection to the claim 1 is withdrawn due to the amendment and the objection the claim 33 is maintained because the limitation "parts" appeared twice in line 8. Applicant is requested to make appropriate correction.
4. The rejection to claims 24, 31 and 65 under 35 USC 112 2nd paragraph is withdrawn due to the amendment.
5. The rejection to the claims 1-18, 50-52, 65-66, 68-75 under 35 U.S.C. 102(b) is maintained and updated to include the newly added limitation(s) and/or remark(s).

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-18, 50, 65-66, 68-73 and 75 are rejected under 35 U.S.C. 102(b) as being anticipated by Daughton et al.

Daughton teaches the invention (claims 1,8, 12, 50, 65-66 and 71) as claimed including a method for developing memory modules using chips parts, and a process for patching with partially defective parts to create memory modules comprising: testing the part for failed segments and identifying working segments in the parts is taught as a bit lines test (see, col. 4, lines 42-63); storing the parts according to the results of the testing is taught as the failed chips are stored in the groups (see, col. 4, lines 64-68); combining the working segments of different selected memory parts, including working segments of at least one partially defective memory part to form a fully functional transparent memory module is taught as the cells can be combined or substituted by using the redundant line in organizing the defective chips which can be made usable (see, col. 9, lines 20-43).

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As to claims 2-3, 9-11, 13-14 and 70, Daughton teaches the method and process wherein at least one of the part is package is taught as the memory system uses memory modules containing semiconductor storage arrays having good and defective cells in the package (see, col. 2, lines 18-25).

As to claims 4-5 and 15-16, Daughton teaches the method and process wherein at least one of the part must be replaced by a substitute part is taught as the memory chips having redundant line for substitution in place of a failing line in the group of cells (see, col. 4, lines 32-41).

As to claims 6-7, 17-18, 68-69, 72-73 and 75, Daughton teaches the method and process wherein the patching is done using solder dot connections to provide a logical oring of sets of I/O lines on a printed circuit board is taught as the redundant lines for defective line is accomplished by mounting the chips on one of nine different substrate (see, col. 4, lines 32-68).

7. Claims 51-52, 67 and 74 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 19-49 and 53-64 are allowable over the prior art of the record.

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9. Applicant's arguments with respect to claims 1-18, 50, 65-66 have been fully considered but they are not deemed to be persuasive.

As to the remarks: Applicant appears to be arguing limitations to extant greater than actually claimed. Applicant has stated in the amendment filed 10/1/99 that "each structure is designed to a "target" memory capacity without inclusion of spare data lines; multiple defects in an independent structure can be corrected; a corrected memory end product comprises a "main" part, an independent "backup" part, and a correcting pattern of interconnection of data lines with the data I/O connections of the end product and correction is accomplished by substitution of an operational data line of a "backup" part for a defective line of a "main" part" (emphasis added). There is nothing in the claim language to prevent equating "memory module for memory system" in the regards to "memory structure".

The Daughton reference teaches a method for developing memory modules using chips parts, and a process for patching with partially defective parts to create memory modules comprising: testing the part for failed segments and identifying working segments in the parts is taught as a bit lines test; storing the parts according to the results of the testing is taught as the failed chips are stored in the groups; combining the working segments of different selected memory parts, including working segments of at least one partially defective memory part to form a fully functional transparent memory module is taught as the cells can be combined or substituted by using the redundant line in organizing the defective chips which can be made usable which allows functions to be determined and performed as taught by the claim language.

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10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.


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11. Any inquiry concerning this or earlier communication from the examiner should be directed to Ramesh Patel at (703) 308-6673.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Grant, can be reached on (703)308-1108.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3800.


PAUL P. GORDON
PRIMARY EXAMINER

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November 30, 1999